In the claims:

Add the following claim:

15. A device for producing light metal castings composed of magnesium or magnesium alloys, comprising a dosing chamber to which a liquid metal is supplied; a preliminarily evacuated mold nest into which the liquid metal is pressed by pumping gas under pressure into the dosing chamber; a system which is pressure-tightly closed from outside for performing a production process; a melting device which adjoins a feed system and has a lower part in which heating of the liquid metal is performed; means for performing overheating of the liquid metal from a melting condition from a temperature of approximately 630°C to a rigidification condition at a tool side to a lower region of a valve seat; and a differential pressure system by which a protective gas is supplied and withdrawn.